

ABSTRACT

A reactive functional group is introduced into titanium oxide, and an active group which is capable of reacting with the reactive functional group is introduced into a polymer-based material, and the reactive functional group and the active group are reacted with each other, thereby producing a titanium oxide complex in which the polymer-based material and the titanium oxide chemically bond to each other. Further, a functional group of the polymer-based material and the titanium oxide are reacted with each other, thereby producing the titanium oxide complex without performing chemical pretreatment with respect to the titanium oxide.